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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Russell Andrew Fink

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EXAMINER

TESLOVICH, TAMARA

ART UNIT

PAPER NUMBER

2437

NOTIFICATION DATE

DELIVERY MODE

10/08/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@VERIZON.COM

Office Action Summary	Application No. 09/928,133	Applicant(s) FINK ET AL.	
	Examiner Tamara Teslovich	Art Unit 2437	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 and 25-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 25-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This Office Action is in response to Applicant's Remarks filed September 15, 2010.

Claims 1-20 and 25-32 are pending and herein considered.

Response to Arguments

Applicant's arguments filed September 15, 2010 have been fully considered but they are not persuasive.

In response to Applicant's first set of remarks regarding Alkhatib's alleged failure to teach or suggest "a key exchanger configured to repeatedly derive a cipher key such that the resulting cipher key changes over time" and decrypting, according to a cipher algorithm keyed by the cipher key, the extracted packet header data to determine a restored address" the Examiner respectfully disagrees for the following reasons. Alkhatib provides for the encoding/translation of addresses in order to provide more efficient use of storage space, security and compatibility (par 36). This translation may be done via known methods of encryption, compression, or encoding and allows for an entity to secure data at one end while allowing for the receiving entity to extract the information at a later time by unencoding, decoding, decompressing, unencrypting the information using that same information that was used to encode, compress or encrypt the information originally.

In response to Applicant's remarks concerning independent claims 6, 11, and 16 the Examiner respectfully maintains her rejection for those reasons presented above with respect to claim 1.

In response to Applicant's remarks concerning dependent claims 2-5, 7-10, 12-15, and 25-32 the Examiner respectfully maintains her rejection of the claims based on their dependence on rejected independent claims 1, 6, 11, and 16 and for those reasons presented in the outstanding office action.

In response to Applicant's next set of remarks regarding Alkhatib's alleged failure to teach or suggest "the host portion of the address having been translated without the network portion also being translated, and wherein said translator is configured to restore the host portion of the address without also restoring the network portion of the address" the Examiner respectfully disagrees for the following reasons. Alkhatib provides for a variety of embodiments whereby different portions of a packet's address may be translated while others remain untranslated and whereby different portions of the addresses may be placed in different areas of the headers (par 56). For example, in paragraph 67 the situation arises in which the routing and translation serves to transport the packet to a secondary location where yet another translation must be done in order to locate a particular address within a larger address space.

It is for the reasons presented above and based on the reference in its entirety that the Examiner maintains her rejection for those reasons presented in the outstanding office action and repeated below for Applicant's convenience.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-20 and 25-32 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Application Publication Number 2002/0184390 to Hasan Alkhatib.

As per **claim 1**, Alkhatib teaches an apparatus for detecting adversarial activity on the network, comprising:

a memory configured to store a host table (par 61);

a key exchanger configured to repeatedly derive a cipher key such that the resulting cipher key changes over time (par 67);

a translator configured to restore predetermined portions of packet header information of a data packet, the packet header information including a network portion of a destination address routable over a wide area network and an encrypted host portion of the address identifying a destination host (par 15), the restoration including to:

extract, from the packet header information, predetermined portions of packet header data including the encrypted host portion of the address, decrypt, according to a cipher algorithm keyed by the cipher key, the extracted packet header data to determine a restored address and place the restored address back into the packet header information of the data packet (par 12 “the Domain Name Router receives the data, extracts the destination's domain name from the data, translates that domain name to a local address in its stub network and sends the data to the destination; par 14; par 36 “That extraction or identification can be by unencoding, decoding, decompressing, unencrypting, etc”; par 67);

a mapping device configured to map the restored address to the host table (par 39);

a host resolution device configured to issue a request to the network to resolve the restored address when the restored address does not match an entry in the host table and then supplement the host table with the restored address upon receipt of a reply to the request that indicates that the restored address is valid (par 39; par 61); and

an actuator configured to trigger a security device when the restored address does not match an entry in the host table (par 68 “error message”).

As per **claim 2**, Alkhatib teaches wherein the security device is a logging device configured to log the data packet (par 61).

As per **claim 3**, Alkhatib teaches wherein the security device is configured to signal an alarm when triggered (par 68 “error message”).

As per **claim 4**, Alkhatib teaches wherein said host resolution device is configured to derive the host table using an address resolution protocol (par 67).

As per **claim 5**, Alkhatib teaches a network device configured to place the data packet onto a network when the restored address maps to the host table (par 69).

As per **claim 25**, Alkhatib teaches the host portion of the address having been translated without the network portion also being translated, and wherein said translator is configured to restore the host portion of the address without also restoring the network portion of the address (par 67).

As per **claim 26**, Alkhatib teaches wherein the data packet includes a translated packet header with a plurality of fields carrying packet header information, the translated packet header including the translated packet header information in one or more predetermined fields of the translated packet header interspersed with un-translated packet header information in fields other than the one or more fields of the translated packet header, and wherein said translator is configured to restore at least a portion of the packet header information in the one or more predetermined fields (par 67).

Claims 6-10 and 27-28 correspond to the method employed by the apparatus in claims 1-5 and 25-26 respectively and are rejected accordingly.

Claims 11-15 and 29-30 correspond to a device equivalent to the apparatus in claims 1-5 and 25-26 respectively and are rejected accordingly.

Claims 16-20 and 31-32 correspond to a bastion-host form of the apparatus in claims 1-5 and 25-26 respectively and are rejected accordingly.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tamara Teslovich whose telephone number is (571)272-4241. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2437

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Tamara Teslovich/
Examiner, Art Unit 2437

/Emmanuel L. Moise/
Supervisory Patent Examiner, Art Unit 2437